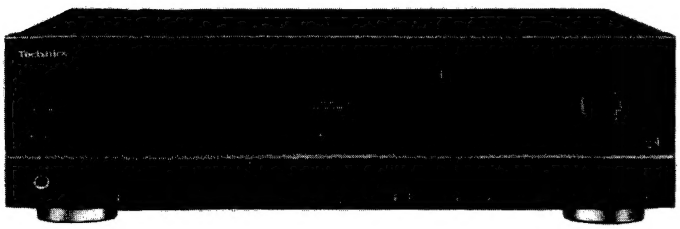
ORDER NO. AD9111276C8

Service Manual

Amplifier

Stereo Integrated Amplifier

SU-VZ320



Colour

(K) ..... Black Type

Areas

Suffix for Model No.	Area	Colour
(EB)	Great Britain.	(K)
(EG)	Continental Europe, Germany and Italy.	
(GN)	Oceania.	

SPECIFICATIONS
(DIN 45 500)

20 Hz~20 kHz continuous power output
both channels driven 2×40 W (8 Ω)
1 kHz continuous power output
both channels driven (THD:1%) 2×50 W (8 Ω)
2×75 W (4 Ω)
63 Hz~12.5 kHz continuous power output
both channels driven (THD: 0.7%) 2×45 W (8 Ω)
2×65 W (4 Ω)
Total harmonic distortion
rated power at 20 Hz~20 kHz 0.02% (8 Ω)
rated power at 1 kHz 0.007% (8 Ω)
half power at 20 Hz~20 kHz 0.02% (8 Ω)
half power at 1 kHz 0.007% (8 Ω)
Intermodulation distortion (50 Hz:7 kHz = 4:1, SMPTE)
rated power 0.02% (8 Ω)
Residual hum and noise 1 mV
Damping factor 40 (8 Ω)
20 (4 Ω)
Headphones output level and impedance 450 mV/330 Ω
Load impedance
A or B 4~16 Ω
A and B 8~16 Ω
Input sensitivity and impedance
PHONO MM 2.5 mV/47 kΩ
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT 150 mV/22 kΩ
Phono maximum input voltage (1 kHz, RMS)
MM 150 mV (150 mV, IHF '66)
S/N (rated power, 4 Ω)
PHONO MM 76 dB (79 dB, IHF '66)
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT
91 dB (99 dB, IHF '66)
S/N at −26dB power (4 Ω)
PHONO MM 68 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT 70 dB
S/N at 50 mW power (4 Ω)
PHONO MM 64 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT 64 dB
Frequency response
PHONO MM RIAA standard curve ±1 dB (30 Hz~15 kHz)
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT
3 Hz~80 kHz (+0, −3 dB)
+0 dB, −0.3 dB (20 Hz~20 kHz)
Tone controls
BASS 50 Hz, +10~−10 dB
TREBLE 20 kHz, +10~−10 dB
Subsonic filter 30 Hz, −6 dB/oct
Loudness control (volume at −30 dB) 50 Hz, +9 dB
Output voltage
TAPE 1, TAPE 2/DAT REC OUT 150 mV
Channel balance (AUX, 250 Hz~6.3 kHz) ±1 dB
Channel separation (AUX, 1 kHz) 50 dB

■ GENERAL

Power consumption 175 W
Power supply AC 50 Hz/60 Hz, 230 V/240 V
Dimensions (W × H × D) 430×125×320 mm
Weight 7.3 kg

Notes:
1. Specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

Technics

■ CONTENTS

■ BEFORE REPAIR

(1) Turn off the power supply. Using a 10Ω, 5 W resistor connect both ends of power supply capacitors (C705, C706, 6800 μF) in order to discharge the voltage.

(2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50 Hz in NO SIGNAL mode should be shown below with respect to supply voltage 230 V/240 V.

Power supply voltage	AC 230 V	AC 240 V
Consumed current 50 Hz	57~230 mA	55~220 mA

■ PROTECTION CIRCUITRY

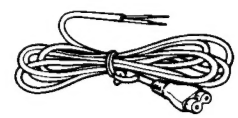
The protection circuitry may have operated if either of the following conditions is noticed:
•No sound is heard when the power is switched ON.
•Sound stops during a performance.
The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.
If this occurs, follow the procedure outlined below:

1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

Note:
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

■ ACCESSORY

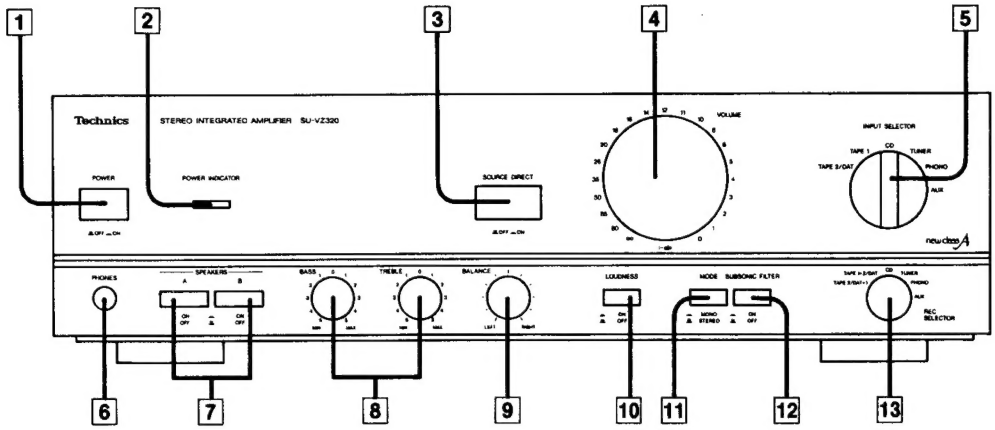
•AC Power Supply Cord	1
RJA0019-1K	For (EG) area
SJA193	For (EB) area
SJA173	For (GN) area



Configuration of the AC power supply cord differs according to area.

■ LOCATION OF CONTROLS

•Front panel



1 Power switch (POWER)

2 Power indicator (POWER INDICATOR)
When the power is switched ON, this indicator illuminates.

3 Source direct switch (SOURCE DIRECT)
This switch is used when enjoying high quality sound playback such as that from a CD.

4 Volume control (VOLUME)

5 Input selector (INPUT SELECTOR)
This selector is used to select the sound source to be heard, such as a disc, radio broadcast, etc.

6 Headphones jack (PHONES)

7 Speaker selectors (SPEAKERS)
These selectors are used to select the speaker systems to be used.

8 Tone controls (BASS/TREBLE)
The bass control is used to adjust the low-frequency sound range, and the treble control is used to adjust the high-frequency sound range.

9 Balance control (BALANCE)
This control is used to adjust the left/right volume balance.

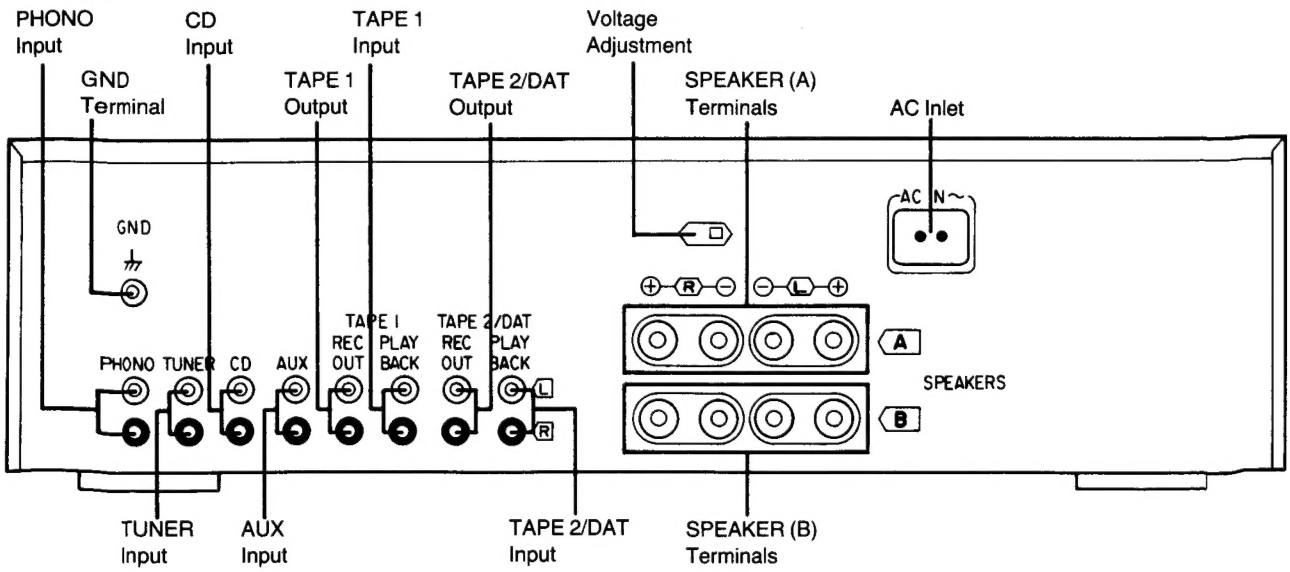
10 Loudness switch (LOUDNESS)
This switch is used when listening to music at a low volume level. Auditory perception of sound in the low frequency range falls off at low volume, but when the switch is set to the "ON" position, this deficiency is compensated for, so that the full impact of the musical performance can be enjoyed.

11 Mode selector (MODE)
This selector is used to select stereo or monaural operation.

12 Subsonic filter switch (SUBSONIC FILTER)
This switch is used to eliminate ultra-low-frequency noise such as motor "rumble" and unusual vibration of the woofer cone caused by a warped disc, etc.

13 Recording selector (REC SELECTOR)
This selector is used to select the sound source to be recorded by the connected tape deck 1 and/or tape deck 2 (or DAT).

•Rear Panel

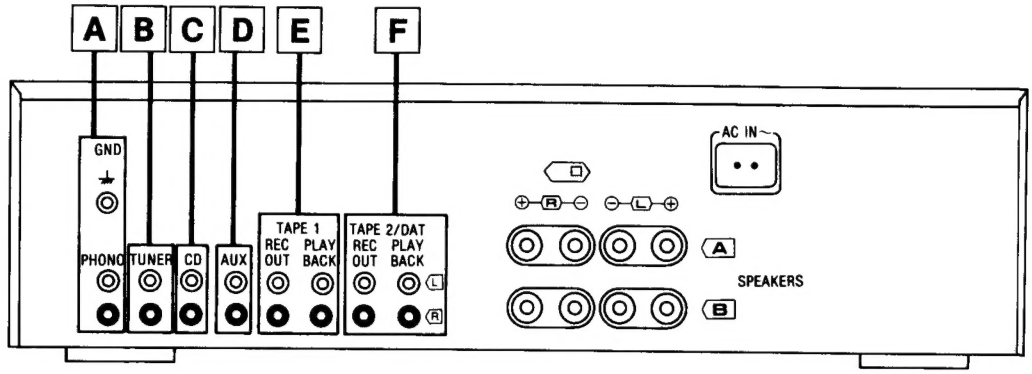


*Phono input capacitance is about 270 pF.

■ CONNECTIONS

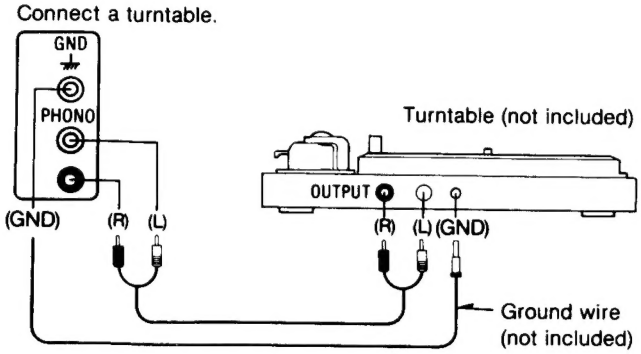
Make connections to each component in the system by using stereo connection cables (not included).

Stereo connection cable White (L) / Red (R)



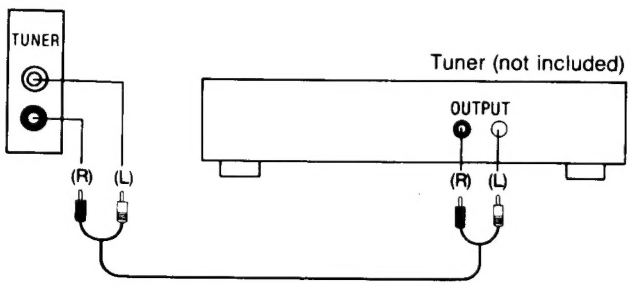
A "PHONO" terminals

Connect a turntable.



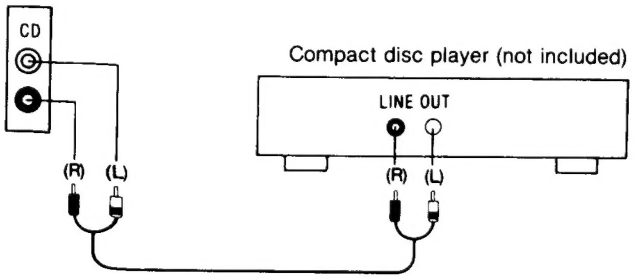
B "TUNER" terminals

Connect a tuner.



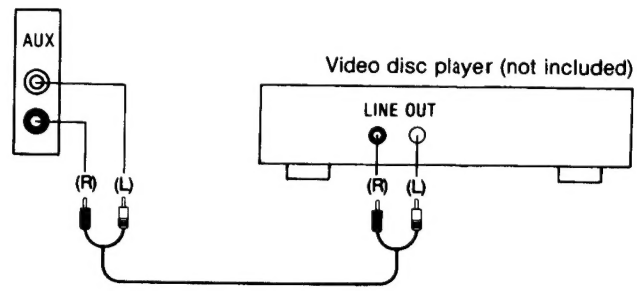
C "CD" terminals

Connect a compact disc player.



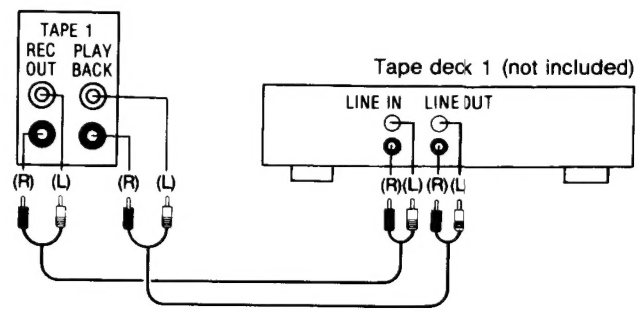
D "AUX" terminals

Connect a component such as a video disc player (audio only connectable), etc.



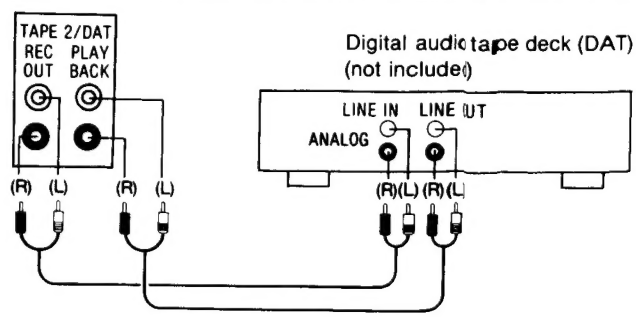
E "TAPE 1" terminals

Connect a first tape deck.



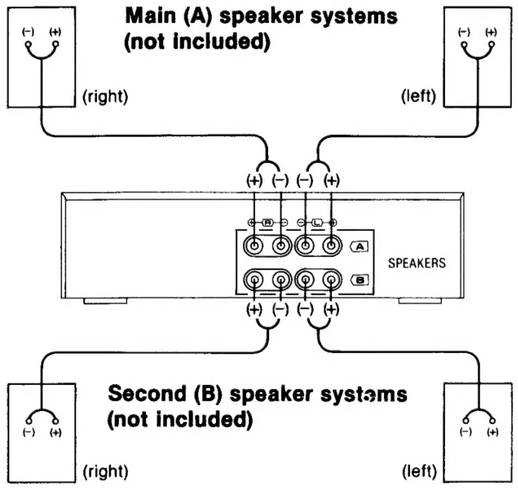
F "TAPE 2/DAT" terminals

Connect a second tape deck or a digital audiotape deck (DAT).



Connection to speaker systems

One pair of speaker systems can be connected to the "A" terminals of this unit and one pair to the "B" terminals.
Make connections to each speaker system by using speaker cords (not included).

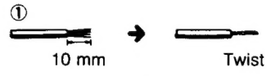


■ Load impedance

- When only the "A" or only the "B" terminals are used: 4 – 16 ohms
- When both the "A" and the "B" terminals are used simultaneously: 8 – 16 ohms

■ To connect cords to terminals

① Strip off the outer covering, and twist the center conductor.

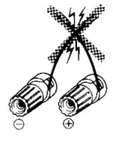


② Turn completely to the left.

③ Insert the wire and turn completely to the right. Pull the cord to assure a proper connection.

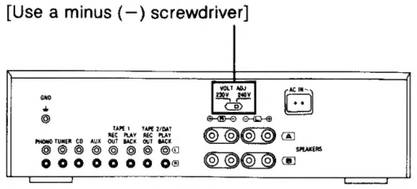
Note: Be sure to only connect positive (+) cords to positive (+) terminals, and negative (–) cords to negative (–) terminals.

Note:
To prevent damage to circuitry, never short-circuit the plus (+) and minus (–) speaker wires.



To set the power voltage

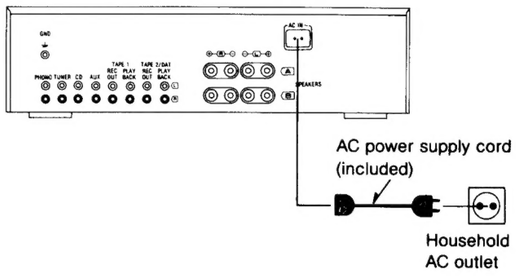
Set the voltage selector to the voltage setting for the area in which the unit will be used.
[Use a minus (–) screwdriver]



Note:
Note that this unit will be seriously damaged if this setting is not made correctly.

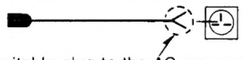
To connect the AC power supply cord (included)

Connect the AC power supply cord (included) after all other cables and cords are connected.



Note:
Configuration of AC power supply cord differs according to area.

For United Kingdom



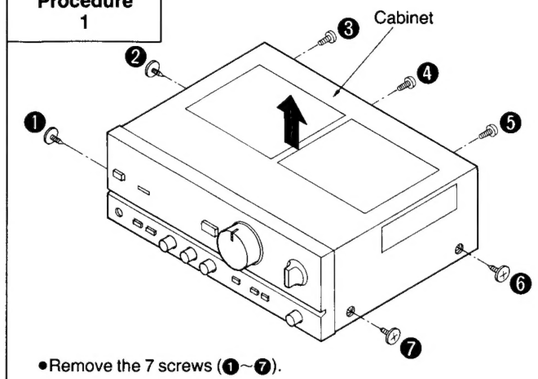
Fit a suitable plug to the AC power supply cord.

■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1 — Removal of the Cabinet

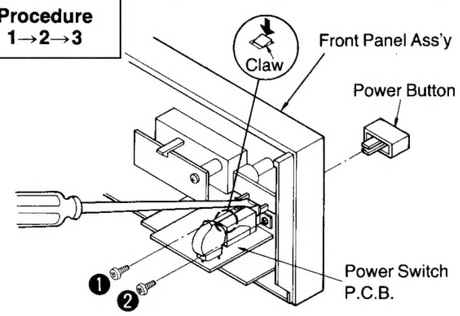
Procedure 1



- Remove the 7 screws (❶~❼).

Ref. No. 3 — Removal of the Power Switch P.C.B.

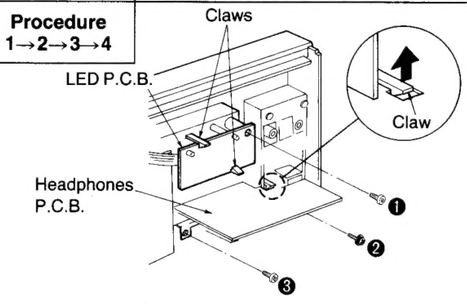
Procedure 1→2→3



1. Remove the 2 screws (❶, ❷).
2. Release the 1 claw.
3. Remove the power button by pushing it from behind the front panel ass'y.

Ref. No. 4 — Removal of the LED P.C.B. and Headphones P.C.B.

Procedure 1→2→3→4



Removal of the LED P.C.B.

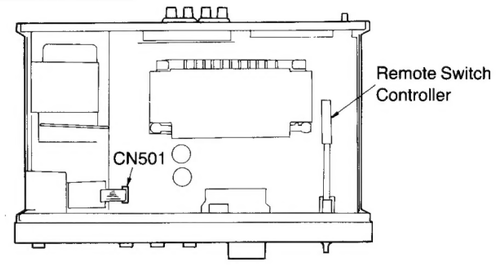
1. Remove the 1 screw (❶).
2. Release the 2 claws.

Removal of the headphones P.C.B.

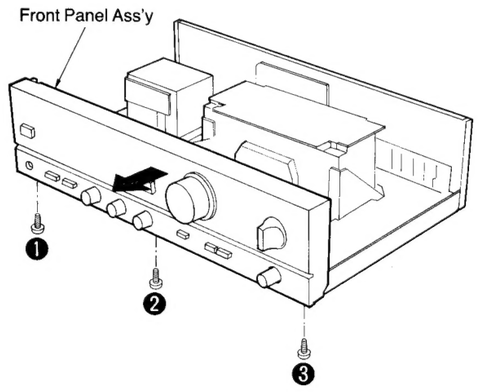
1. Remove the 2 screws (❷, ❸).
2. Release the 1 claw.

Ref. No. 2 — Removal of the Font Panel Ass'y

Procedure 1→2



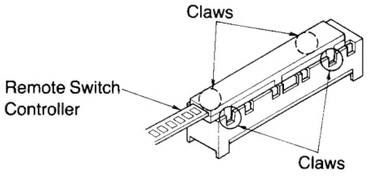
1. Remove the 1 flat cable (CN501).
2. Remove the remote switch controller.



3. Remove the 3 screws (❶~❸).
4. Remove the front panel ass'y in the direction of arrow.

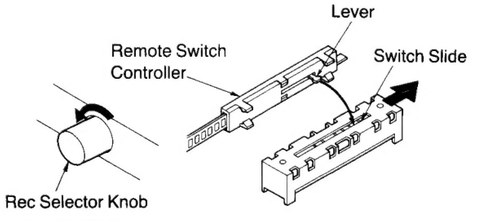
■ Removal of the Remote Switch Controller

- Remove the 4 claws.



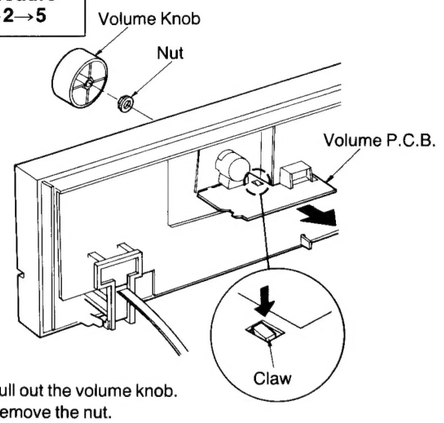
■ Replacing of the Remote Switch Controller

1. Fully rotate the recording selector Knob counterclockwise.
2. Push the switch slide in the direciton of arrow.



Ref. No. 5 — Removal of the Volume P.C.B.

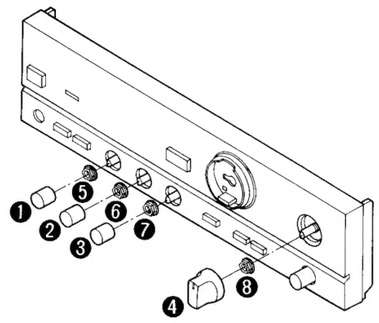
Procedure 1→2→5



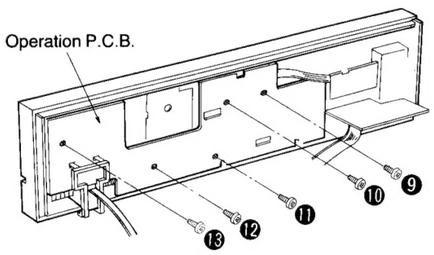
1. Pull out the volume knob.
2. Remove the nut.
3. Release the 1 claw.

Ref. No. 6 — Removal of the Operation P.C.B.

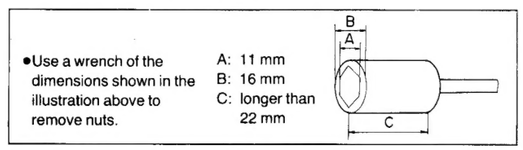
Procedure 1→2→5→6



1. Pull out the 4 knobs (❶~❹).
2. Remove the 4 nuts (❺~❽).



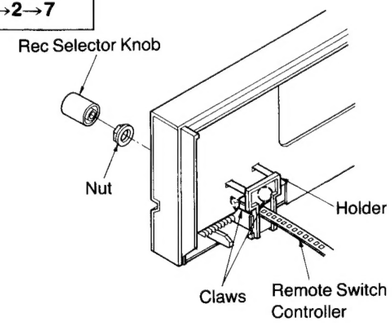
3. Remove the 5 screws (❾~⓭).



- Use a wrench of the dimensions shown in the illustration above to remove nuts.
  A: 11 mm
  B: 16 mm
  C: longer than 22 mm

Ref. No. 7 — Removal of the Remote Switch Controller

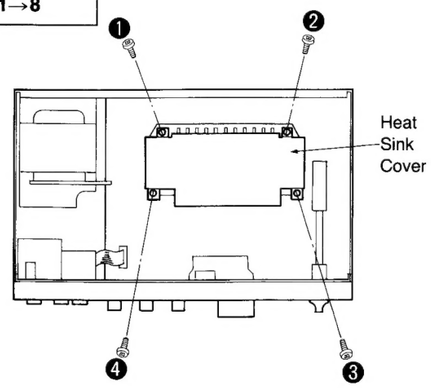
Procedure 1→2→7



1. Pull out the rec selector knob.
2. Remove the nut.
3. Remove the remote switch controller in the direction of arrow.

Ref. No. 8 — Removal of the Heat Sink Cover

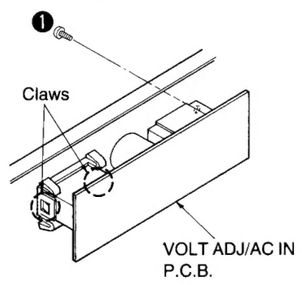
Procedure 1→8



- Remove the 4 screws (❶~❹).

Ref. No. 9 — Removal of the VOLT ADJ/AC IN P.C.B.

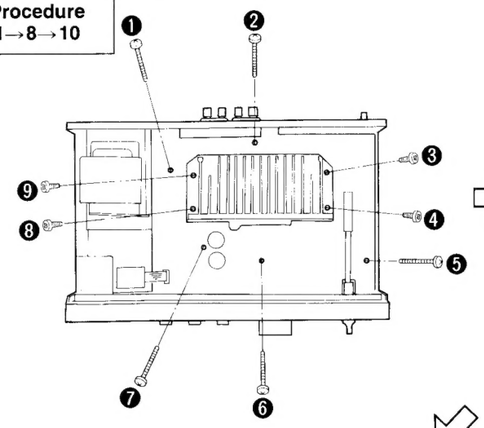
Procedure 1→9



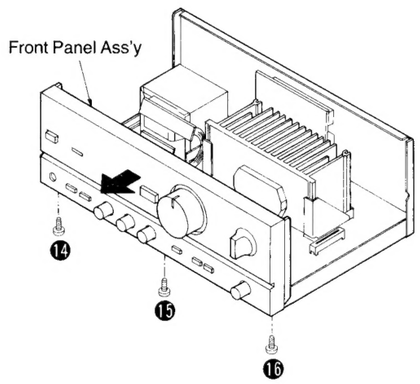
1. Remove the 1 screw (❶).
2. Release the 2 claws.

Ref. No. 10 — Checking of the Main P.C.B.

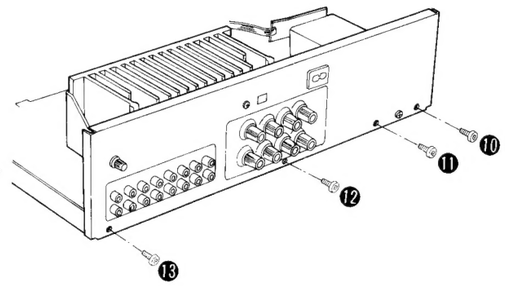
Procedure 1→8→10



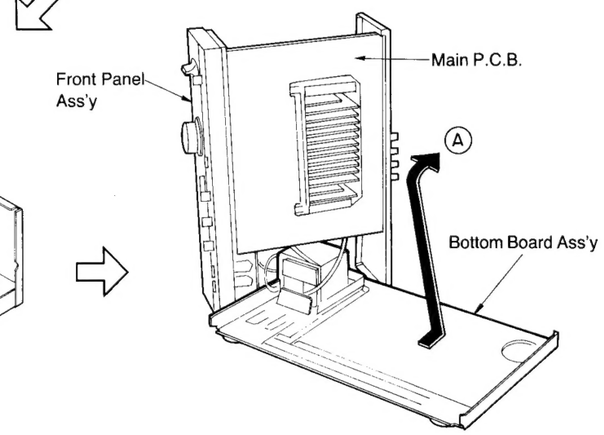
1. Remove the 9 screws (❶~❾).



3. Remove the 3 screws (⓮~⓰).
4. Remove the front panel ass'y.



2. Remove the 4 screws (⓾~⓭).

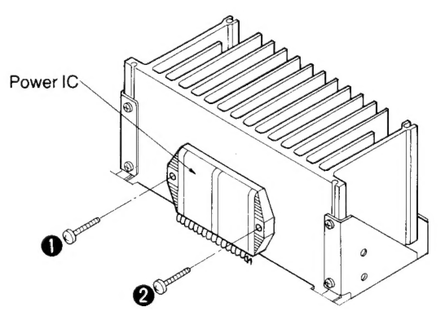


5. Remove the main P.C.B. unit in the direction of arrow Ⓐ.
6. Reinstall the front panel ass'y to the main P.C.B.

Ref. No. 11 — Removal of the Power IC

Procedure 1→8→10→11

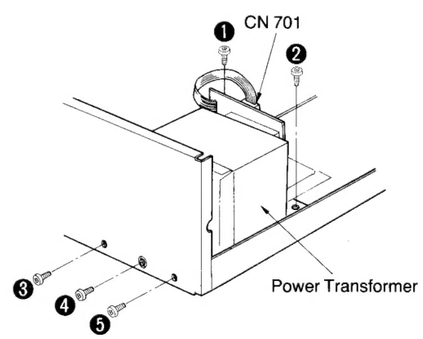
1. Unsolder the power IC.
2. Remove the 2 screws (❶, ❷).



- When mounting the power IC, apply silicon thermal compound (RFKX0002 or equivalent) to the rear of the power IC.

Ref. No. 12 — Removal of the Power Transformer

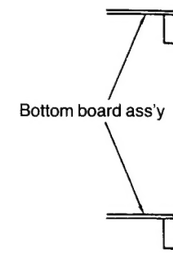
Procedure 1→12



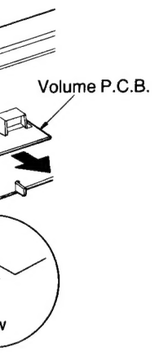
1. Remove the 1 flat cable (CN701).
2. Remove the 5 screws (❶~❺).

•Replacement o

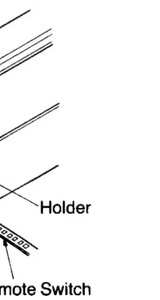
Remove the 4 heat r
with a pair of nippers
To replace the foot (
melt the 4 posts with



lume P.C.B.

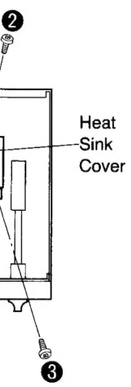


mote Switch



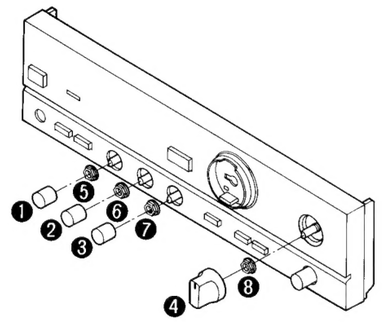
he direction of arrow.

at Sink Cover

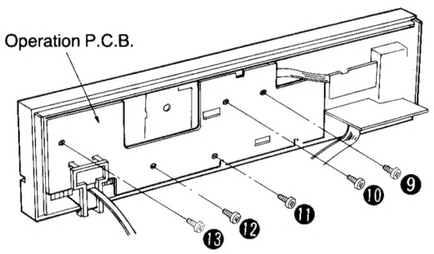


Ref. No. 6	Removal of the Operation P.C.B.

Procedure
1→2→5→6

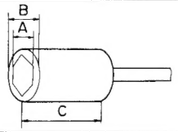


1. Pull out the 4 knobs (❶~❹).
2. Remove the 4 nuts (❺~❽).



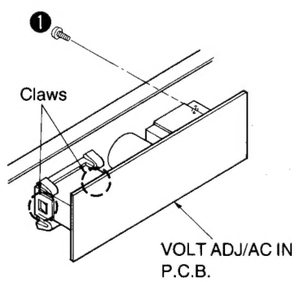
3. Remove the 5 screws (❾~⓭).

- Use a wrench of the dimensions shown in the illustration above to remove nuts.
  - A: 11 mm
  - B: 16 mm
  - C: longer than 22 mm



Ref. No. 9	Removal of the VOLT ADJ/AC IN P.C.B.

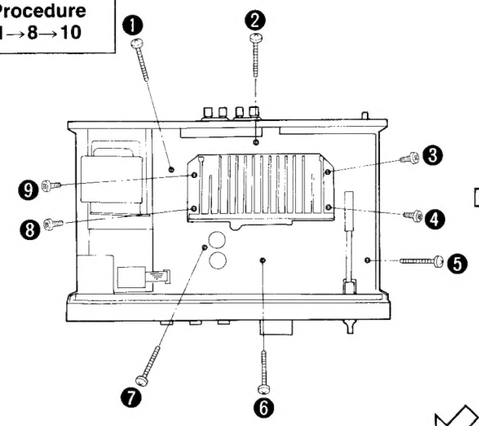
Procedure
1→9



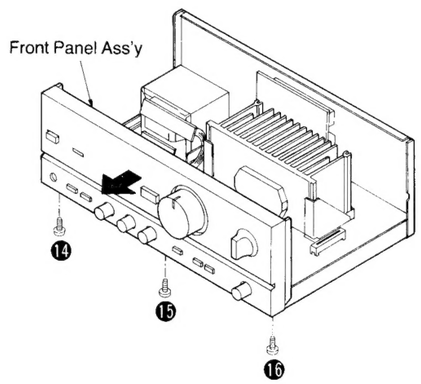
1. Remove the 1 screw (❶).
2. Release the 2 claws.

Ref. No. 10	Checking of the Main P.C.B.

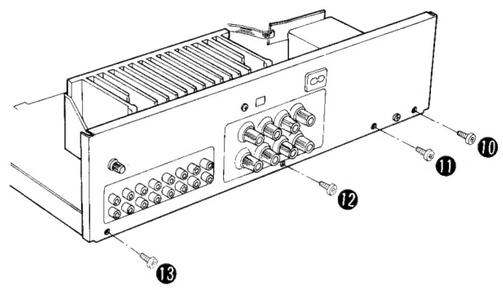
Procedure
1→8→10



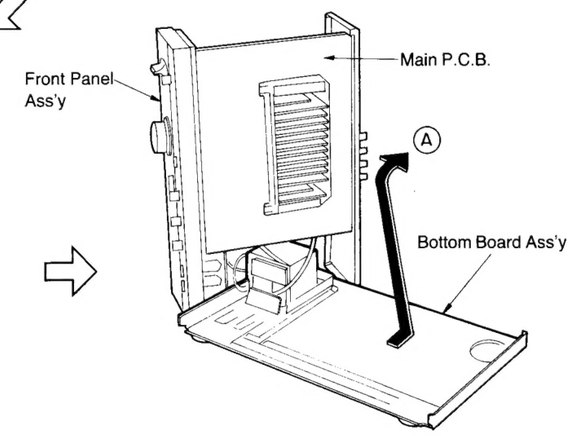
1. Remove the 9 screws (❶~❾).



3. Remove the 3 screws (⓮~⓰).
4. Remove the front panel ass'y.



2. Remove the 4 screws (⓾~⓭).

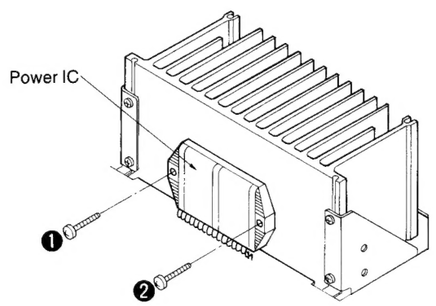


5. Remove the main P.C.B. unit in the direction of arrow Ⓐ.
6. Reinstall the front panel ass'y to the main P.C.B.

Ref. No. 11	Removal of the Power IC

Procedure
1→8→10→11

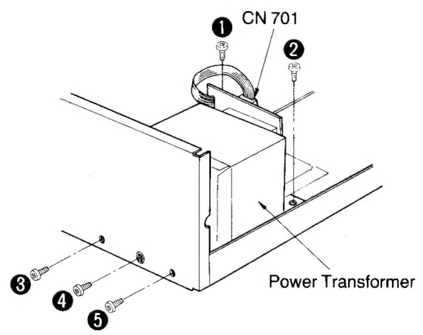
1. Unsolder the power IC.
2. Remove the 2 screws (❶, ❷).



- When mounting the power IC, apply silicon thermal compound (RFKX0002 or equivalent) to the rear of the power IC.

Ref. No. 12	Removal of the Power Transformer

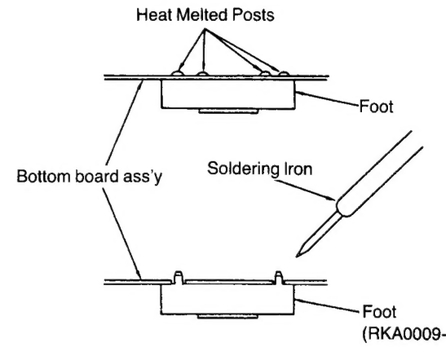
Procedure
1→12



1. Remove the 1 flat cable (CN701).
2. Remove the 5 screws (❶~❺).

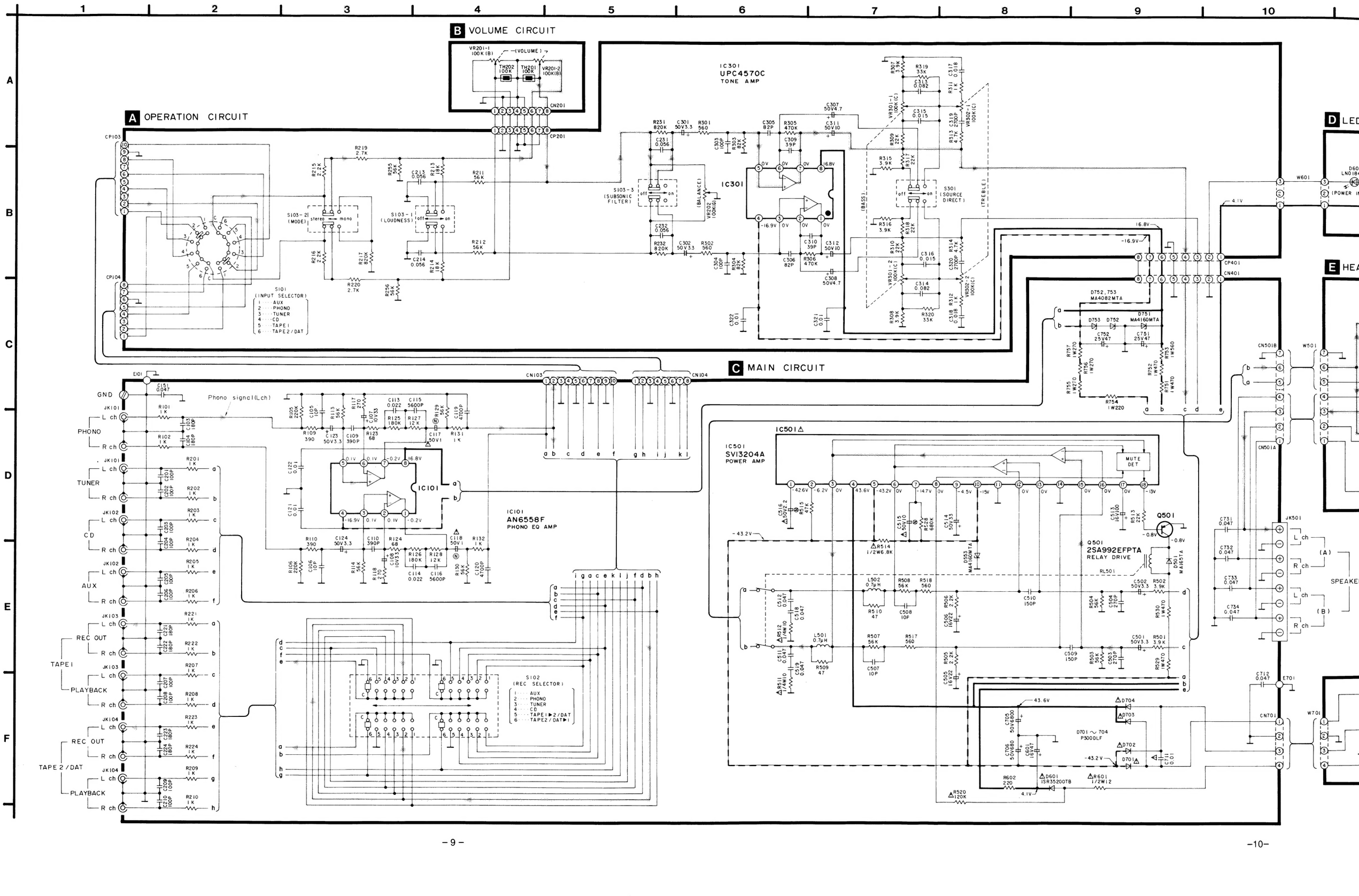
●Replacement of the Foot.

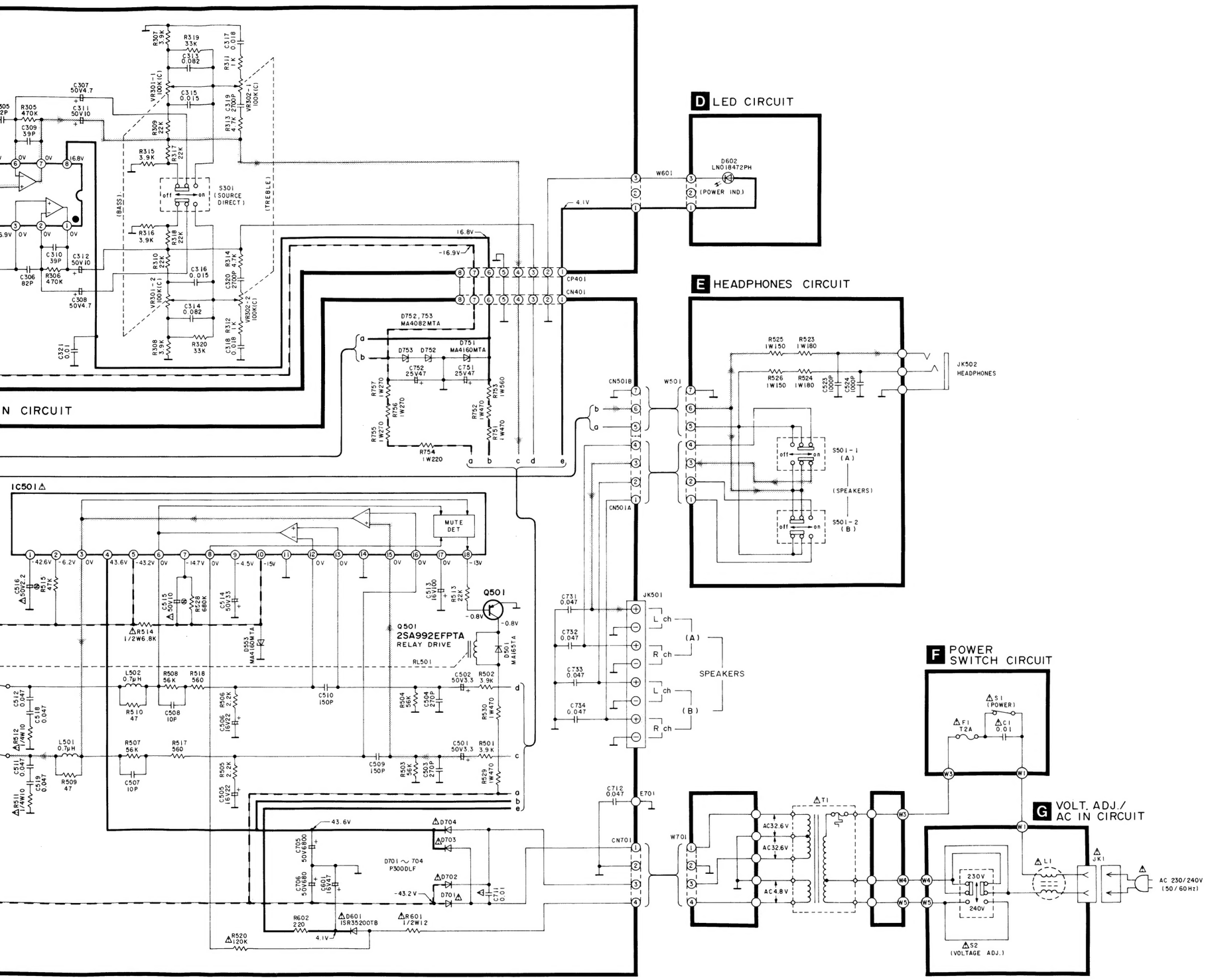
Remove the 4 heat melted posts on the bottom board ass'y with a pair of nippers or similar tool.
To replace the foot (RKA0009-1) on the bottom board ass'y, melt the 4 posts with a soldering iron.



SU-VZ320 SU-VZ320

■ SCHEMATIC DIAGRAM (Parts list on pages 18, 19)





Notes:

- •S1 : Power switch in **"on"** position.
- •S2 : Voltage adjustment switch in **"230 V"** postion.
- •S101 : Input selector switch in **"PHONO"** position.
- •S102 : Recording selector switch in **"TAPE 2/DAT ▶ 1"** position.
- •S103-1 : Loudness switch in **"off"** position.
- •S103-2 : Mode switch in **"stereo"** position.
- •S103-3 : Subsonic filter switch in **"off"** position.
- •S301 : Source direct switch in **"off"** position.
- •S501-1 : Speaker (A) switch in **"on"** positon.
- •S501-2 : Speaker (B) switch in **"off"** position.

- •Indicated voltage values are the standard values for the unit measured electronic circuit tester (high-impedance) with the chassis taken as sta Therefore, there may exist some errors in the voltage values, dependi internal impedance of the DC circuit tester.

——— : Positive Voltage Line
– – – : Negative Voltage Line
▨ : Phono Signal Line

- •Important safety notice:
  Components identified by △! mark have special characteristics importa safety. When replacing any of these components, use only manufactu specified parts.
- •**This schematic diagram may be modified at any time with the dev of new technology.**

Caution!

- •IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care during repair.
- •Cover the parts boxes made of plastics with aluminum foil.
- •Ground the soldering iron.
- •Put a conductive mat on the work table.
- •Do not touch the legs of IC or LSI with the fingers directly.

12 13 14 15 16

JK502
HEADPHONES

Notes:
- S1 : Power switch in **"on"** position.
- S2 : Voltage adjustment switch in **"230 V"** postion.
- S101 : Input selector switch in **"PHONO"** position.
- S102 : Recording selector switch in **"TAPE 2/DAT ▶ 1"** position.
- S103-1 : Loudness switch in **"off"** position.
- S103-2 : Mode switch in **"stereo"** position.
- S103-3 : Subsonic filter switch in **"off"** position.
- S301 : Source direct switch in **"off"** position.
- S501-1 : Speaker (A) switch in **"on"** positon.
- S501-2 : Speaker (B) switch in **"off"** position.

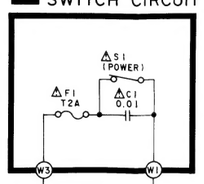
- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

——— : Positive Voltage Line
– – – – : Negative Voltage Line
▒▒▒▒ : Phono Signal Line

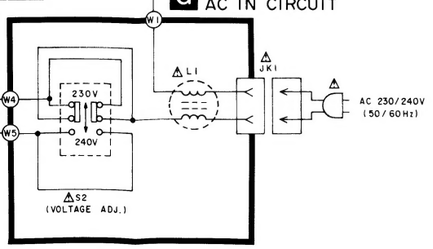
- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- **This schematic diagram may be modified at any time with the development of new technology.**

Caution!
- IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care during repair.
- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers directly.

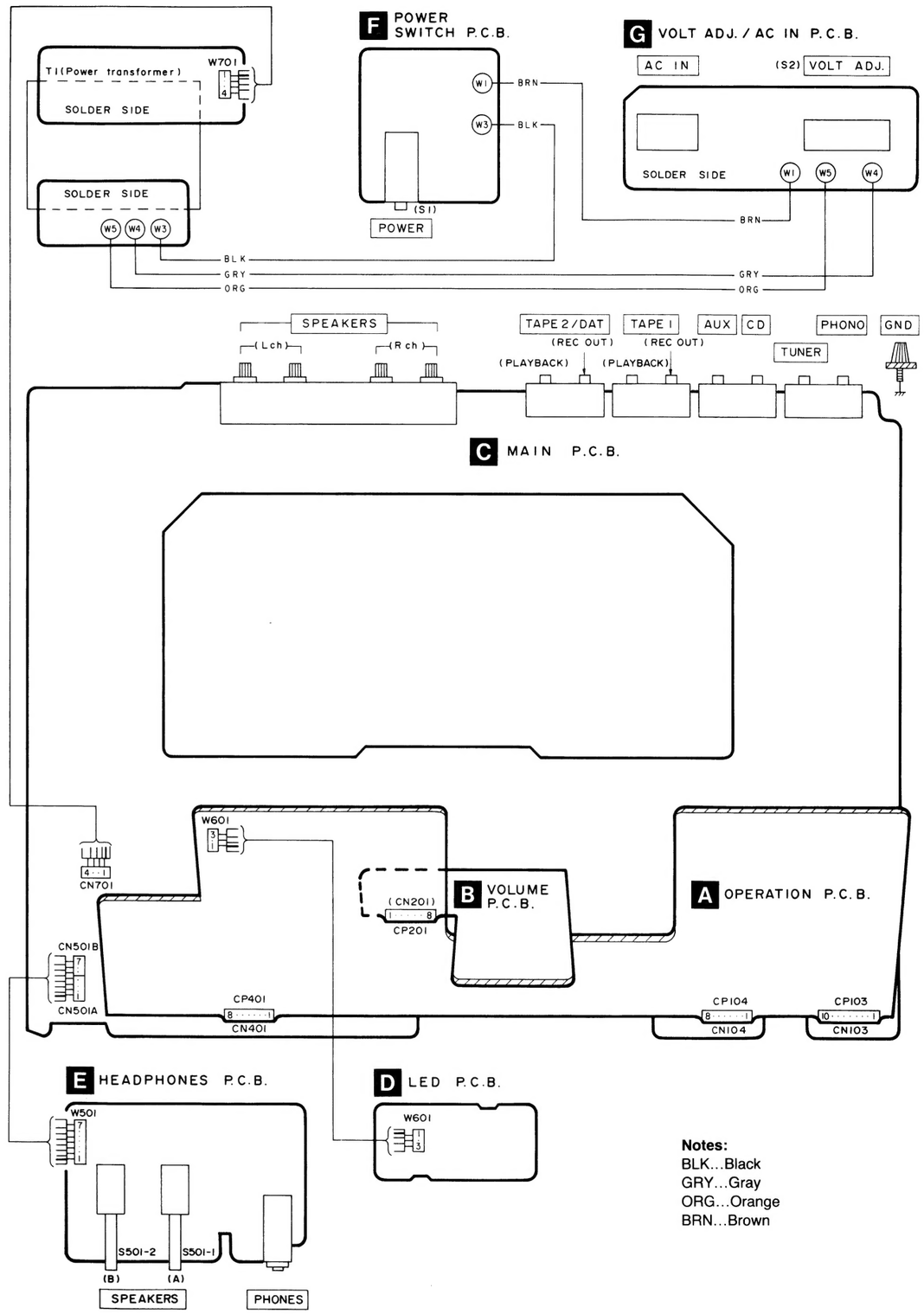
F POWER SWITCH CIRCUIT



G VOLT. ADJ./ AC IN CIRCUIT

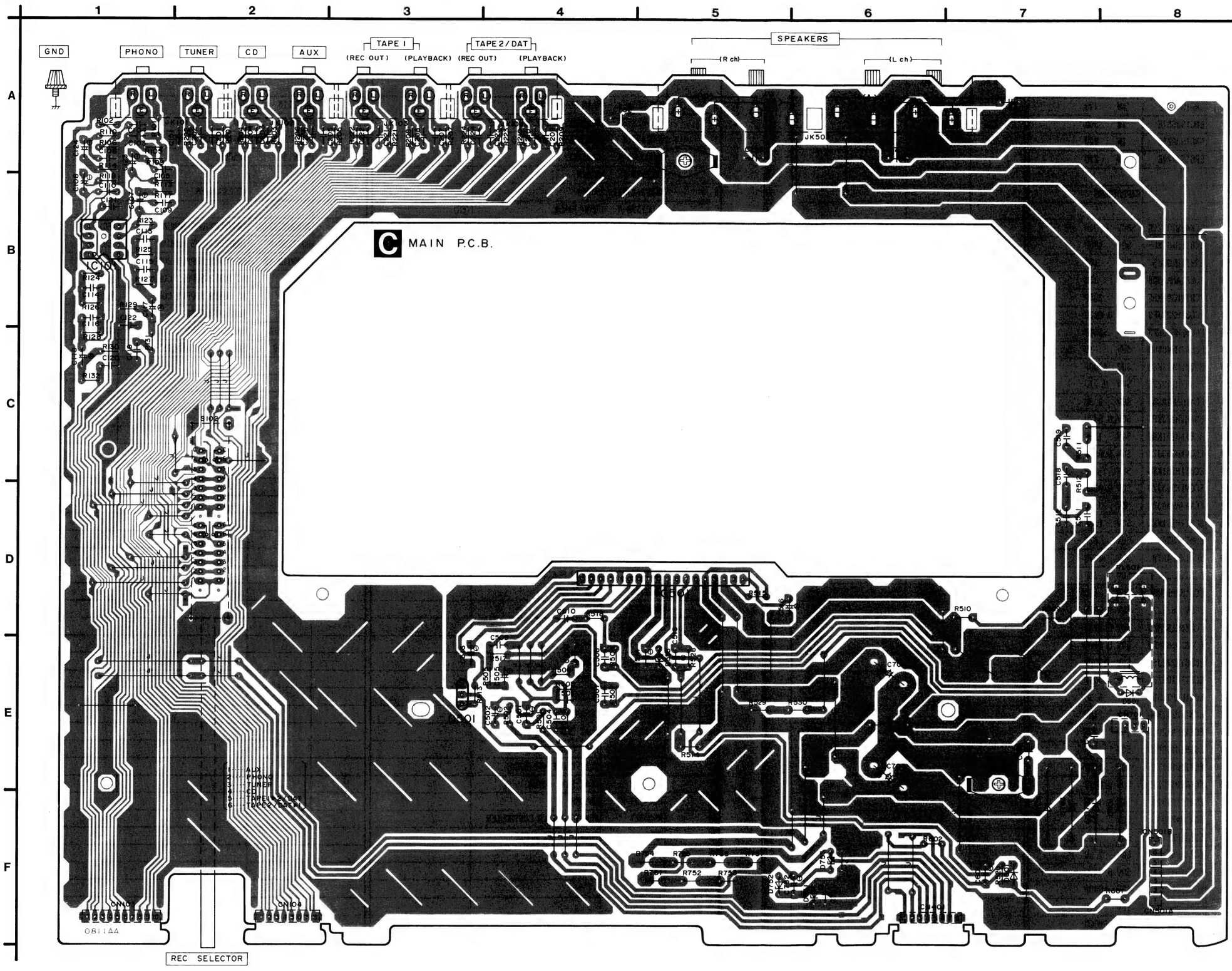


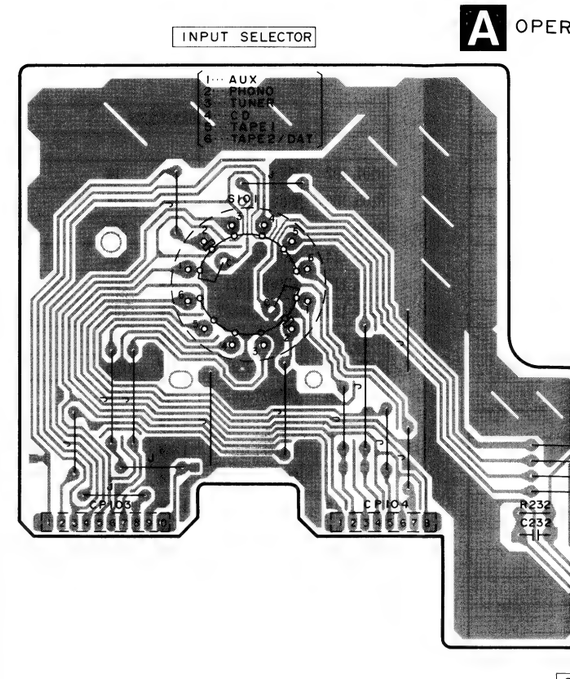
■ WIRING CONNECTION DIAGRAM

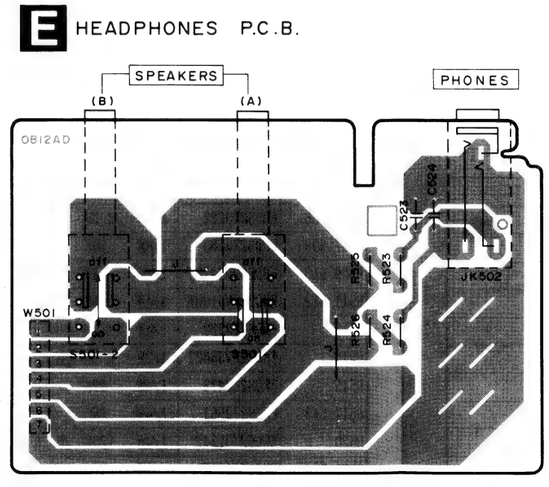


Notes:
BLK...Black
GRY...Gray
ORG...Orange
BRN...Brown

■ PRINTED CIRCUIT BOARDS (Parts list on pages 18, 19)



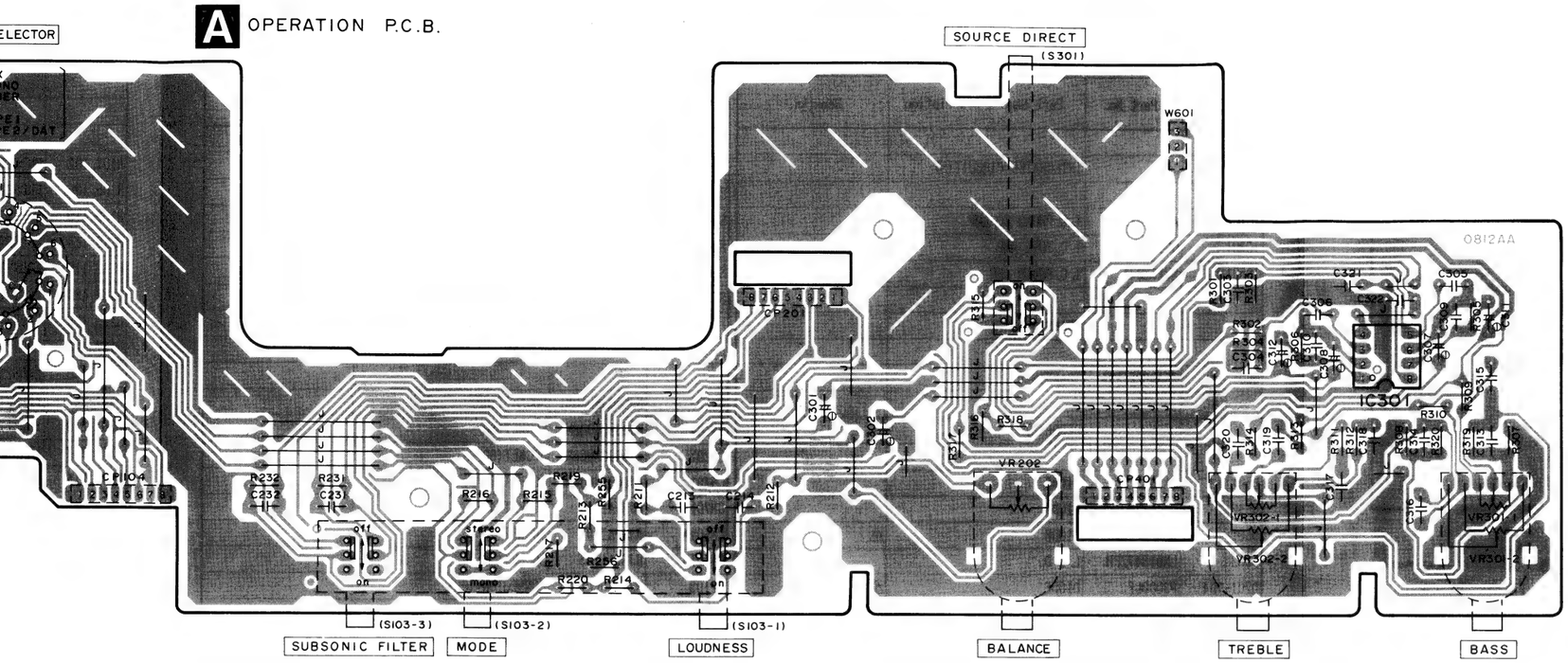




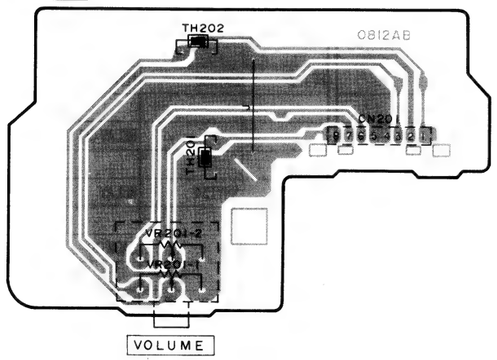
•This circuit board diagram may be modified at any time with the d

10 11 12 13 14 15 16 17 18 19

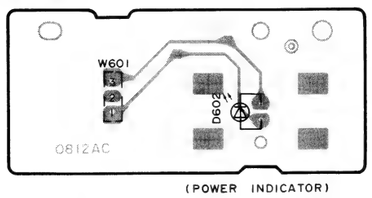
A OPERATION P.C.B.



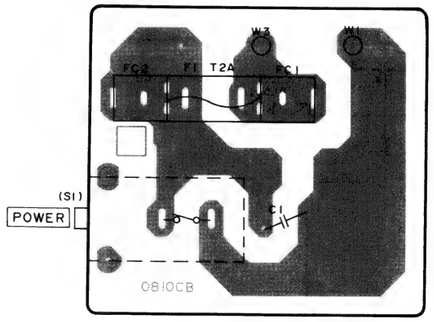
B VOLUME P.C.B.



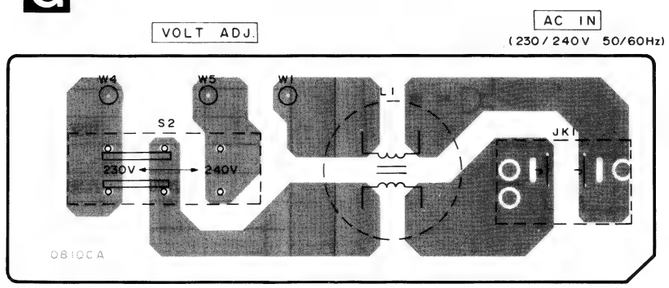
D LED P.C.B.

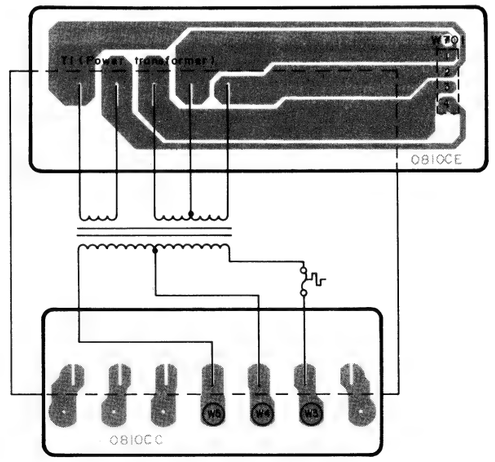


F POWER SWITCH P.C.B.



G VOLT ADJ. /AC IN P.C.B.

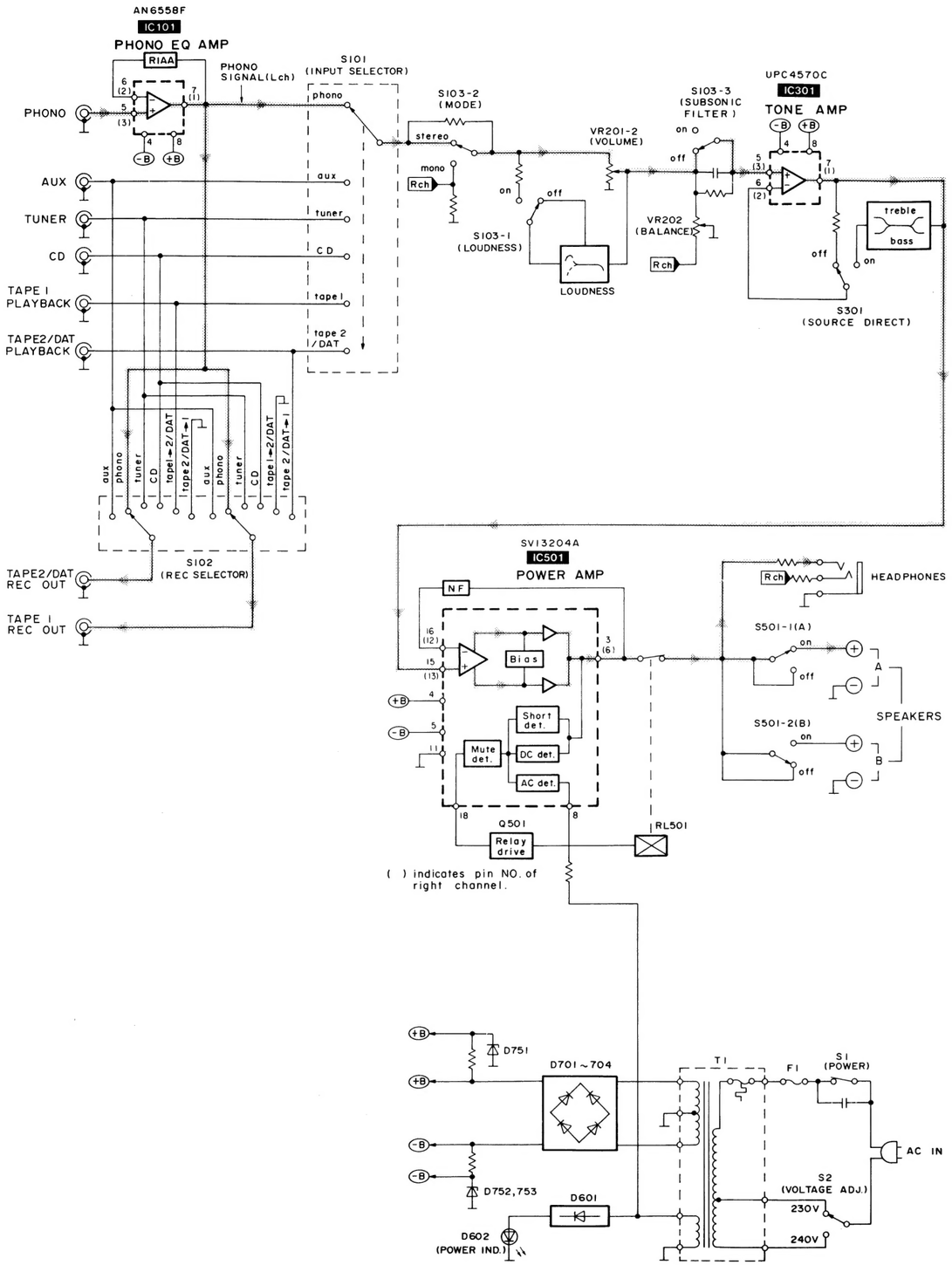




• Terminal guide of IC's transistors and diodes

AN6558F UPC4570C	SVI3204A
2SA992EFPTA	MA165TA ISR35200TB
MA4160MTA	MA4082MTA
P300DLF	LN018472PH

■ BLOCK DIAGRAM



■ REPLACEMENT PARTS LIST

Notes : * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	AN6558F	I. C, PHONO EQ. AMP.	
IC301	UPC4570C	I. C, TONE AMP.	
IC501	SVI3204A	I. C, POWER AMP.	⚠
		TRANSISTOR(S)	
Q501	2SA992EFPTA	TRANSISTOR	
		DIODE(S)	
D501	MA165	DIODE	
D553	MA4160M	DIODE	
D601	1SR35200TB	DIODE	⚠
D602	LN018472PH	L. E. D.	
D701-704	P300DLF	DIODE	⚠
D751	MA4160M	DIODE	
D752, 753	MA4082MTA	DIODE	
		VARIABLE RESISTOR(S)	
VR201	EWJKXA090B15	V. R, VOLUME CONTROL	
VR202	EWHFDA014G15	V. R, BALANCE CONTROL	
VR301	EWC2XA000C15	V. R, BASS CONTROL	
VR302	EWC2XA000C15	V. R, TREBLE CONTROL	
		THERMISTOR(S)	
TH201, 202	ERTD2ZHL104T	THERMISTOR	
		COIL(S)	
L1	SLQZ650MH49	COIL	⚠
L501, 502	SLQY07G-40	COIL	
		TRANSFORMER(S)	
T1	RTP1N5B009-V	POWER TRANSFORMER	⚠
		FUSE(S)	
F1	XBA2C20TB0	FUSE, 250V 2A	⚠
		SWITCH(ES)	

Ref. No.	Part No.	Part Name & Description	Remarks
S1	ESB8249V	SW, POWER	⚠
S2	ESD26200A	SW, VOLTAGE ADJ.	⚠
S101	RSR6B001	SW, INPUT SELECTOR	
S102	RSS6D001	SW, REC. SELECTOR	
S103	ESB68139	SW, LOUDNESS/MODE/SUBSONIC	
S301	ESB68137	SW, SOURCE DIRECT	
S501	RSP2002	SW, SPEAKER SELECTOR	
		CONNECTOR(S)	
CN103	RJU003K010M1	SOCKET(10P)	
CN104	RJU003K008M1	SOCKET(8P)	
CN201	RJU003K008M1	SOCKET(8P)	
CN401	RJU003K008M1	SOCKET(8P)	
CN701	RJS1A1704	SOCKET(4P)	
CN501A	RJS1A1704	SOCKET(4P)	
CN501B	RJS1A1703	SOCKET(3P)	
CP103	RJT003K010M1	CONNECTOR(10P)	
CP104	RJT003K008M1	CONNECTOR(8P)	
CP201	RJT003K008M1	CONNECTOR(8P)	
CP401	RJT003K008M1	CONNECTOR(8P)	
		EARTH TERMINAL(S)	
E101	SNE1004-1	GND PLATE	
E701	SNE1004-1	GND PLATE	
		FUSE HOLDER(S)	
FC1, 2	SJT390	FUSE HOLDER	⚠
		RELAY(S)	
RL501	SSY134	RELAY	
		JACK(S)	
JK1	SJS9231-1B	AC INLET	⚠(EG, EB)
JK1	SJS9234B	AC INLET	⚠(GN)
JK101	SJF3069N	PHONO/TUNER	
JK102	SJF3069N	CD/AUX	
JK103	SJF3069N	TAPE1 REC. OUT/PLAYBACK	
JK104	SJF3069N	TAPE2/DAT	
JK501	RJH4801-1	SPEAKER	
JK502	SJJD19	HEADPHONES	

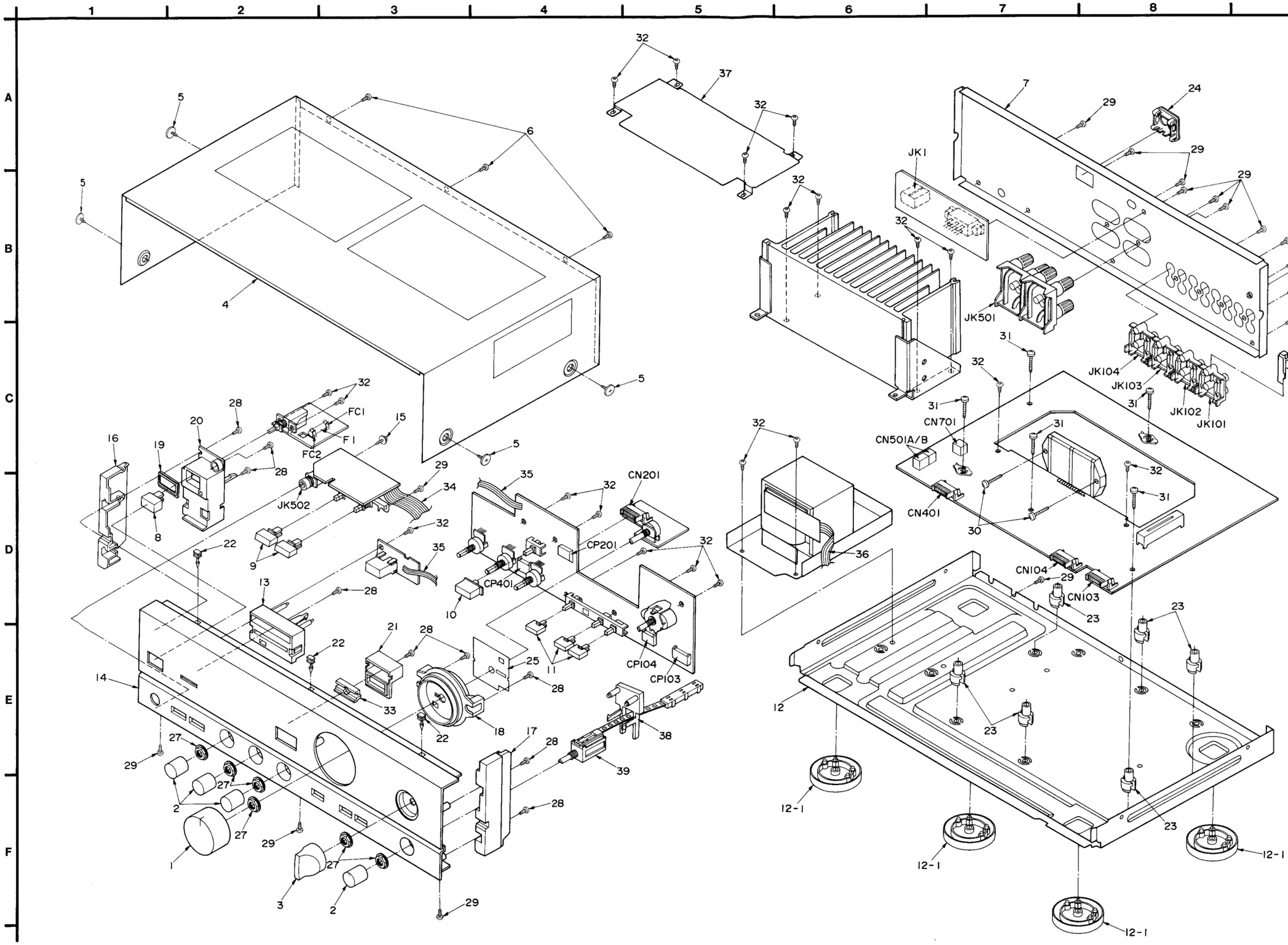
Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R101, 102	ERDS2TJ102	1/4W 1K
R105, 106	ERDS2TJ224T	1/4W 220K
R109, 110	ERDS2TJ391	1/4W 390
R113, 114	ERDS2TJ563	1/4W 56K
R117, 118	ERDS2TJ271	1/4W 270
R123, 124	ERDS2TJ680T	1/4W 68
R125, 126	ERDS2TJ184T	1/4W 180K
R127, 128	ERDS2TJ123	1/4W 12K
R129, 130	ERDS2TJ563	1/4W 56K
R131, 132	ERDS2TJ102	1/4W 1K
R201-210	ERDS2TJ102	1/4W 1K
R211, 212	ERDAS3G563T	1/4W 56K
R213, 214	ERDS2TJ183T	1/4W 18K
R215, 216	ERDS2TJ222	1/4W 2.2K
R217	ERDS2TJ824	1/4W 820K
R219, 220	ERDAS3G272T	1/4W 2.7K
R221-224	ERDS2TJ102	1/4W 1K
R231, 232	ERDS2TJ824	1/4W 820K
R255, 256	ERDAS3G563T	1/4W 56K
R301, 302	ERDAS3G561	1/4W 560
R303, 304	ERDS2TJ823T	1/4W 82K
R305, 306	ERDS2TJ474	1/4W 470K
R307, 308	ERDS2TJ392T	1/4W 3.9K
R309, 310	ERDS2TJ223	1/4W 22K
R311, 312	ERDS2TJ102	1/4W 1K
R313, 314	ERDS2TJ472	1/4W 4.7K
R315, 316	ERDAS3G392T	1/4W 3.9K
R317, 318	ERDAS3G223T	1/4W 22K
R319, 320	ERDS2TJ333	1/4W 33K
R501, 502	ERDS2TJ392T	1/4W 3.9K
R503, 504	ERDS2TJ563	1/4W 56K
R505, 506	ERDS2TJ222	1/4W 2.2K
R507, 508	ERDS2TJ563	1/4W 56K
R509, 510	ERDFS2VJ470T	1/4W 47
R511, 512	ERD25FVJ100T	1/4W 10 ⚠
R513	ERDS2TJ223	1/4W 22K
R514	ERDS1FVJ682T	1/2W 6.8K ⚠
R515	ERDS2TJ473	1/4W 47K
R517, 518	ERDS2TJ561	1/4W 560
R520	ERDS2TJ124T	1/4W 120K ⚠
R523, 524	ERG1SJ181E	1W 180
R525, 526	ERG1SJ151E	1W 150
R528	ERDS2TJ684	1/4W 680K
R529, 530	ERG1SJ471E	1W 470
R601	ERDS1FJ120	1/2W 12 ⚠
R602	ERDS2TJ221	1/4W 220
R751, 752	ERG1SJ471E	1W 470
R753	ERG1SJ561E	1W 560
R754	ERG1SJ221E	1W 220
R755-757	ERG1SJ271E	1W 270
		CAPACITORS
C1	ECKWNS103ZVS	500V 0.01U ⚠
C103, 104	ECBT1H181KB5	50V 180P
C105, 106	ECBT1H100J5	50V 10P
C107, 108	ECEA1AKA330B	10V 33U
C109, 110	ECBT1H391KB5	50V 390P
C113, 114	ECQB1H223JF3	50V 0.022U
C115, 116	ECQB1H562KF3	50V 5600P
C117, 118	ECEA1HKN010B	50V 1U ⚠
C119, 120	ECQB1H472KF3	50V 4700P
C121, 122	ECKR1H103ZF5	50V 0.01U
C123, 124	ECA1HAP3R3B	50V 3.3U
C151	ECKR1H473ZF5	50V 0.047U
C201-210	ECBT1H101KB5	50V 100P
C213, 214	ECQV1H563JZ3	50V 0.056U
C221-224	ECBT1H181KB5	50V 180P
C231, 232	ECQV1H563JZ3	50V 0.056U
C301, 302	ECA1HAP3R3B	50V 3.3U
C303, 304	ECBT1H101KB5	50V 100P
C305, 306	ECBT1H820KB5	50V 82P
C307, 308	ECA1HAP4R7B	50V 4.7U
C309, 310	ECBT1H390J5	50V 39P
C311, 312	ECA1HAP100B	50V 10U
C313, 314	ECQV1H823JZ	50V 0.082U
C315, 316	ECQB1H153KF3	50V 0.015U
C317, 318	ECQB1H183KF3	50V 0.018U
C319, 320	ECQB1H272JF3	50V 2700P
C321, 322	ECBT1E103ZF	25V 0.01U
C501, 502	ECA1HAP3R3B	50V 3.3U
C503, 504	ECBT1H271KB5	50V 270P
C505, 506	ECEA1CKA220B	16V 22U
C507, 508	ECCR1H100KC5	50V 10P
C509, 510	ECBT1H151KB5	50V 150P
C511, 512	ECKR1H473ZF5	50V 0.047U
C513	ECA1CAP101B	16V 100U
C514	ECA1HAP330B	50V 33U
C515	ECEA1HN100SB	50V 10U ⚠
C516	ECEA1HKN2R2B	50V 2.2U ⚠
C518, 519	ECKR1H473ZF5	50V 0.047U
C523, 524	ECBT1H102KB5	50V 1000P
C601	ECA1CAP470B	16V 47U
C705, 706	ECETS1HV682U	50V 6800U
C711	ECKR2H103ZU	500V 0.01U ⚠
C712	ECKR1H473ZF5	50V 0.047U
C731-734	ECQB1H473KF3	50V 0.047U
C751, 752	ECA1EAP470B	25V 47U

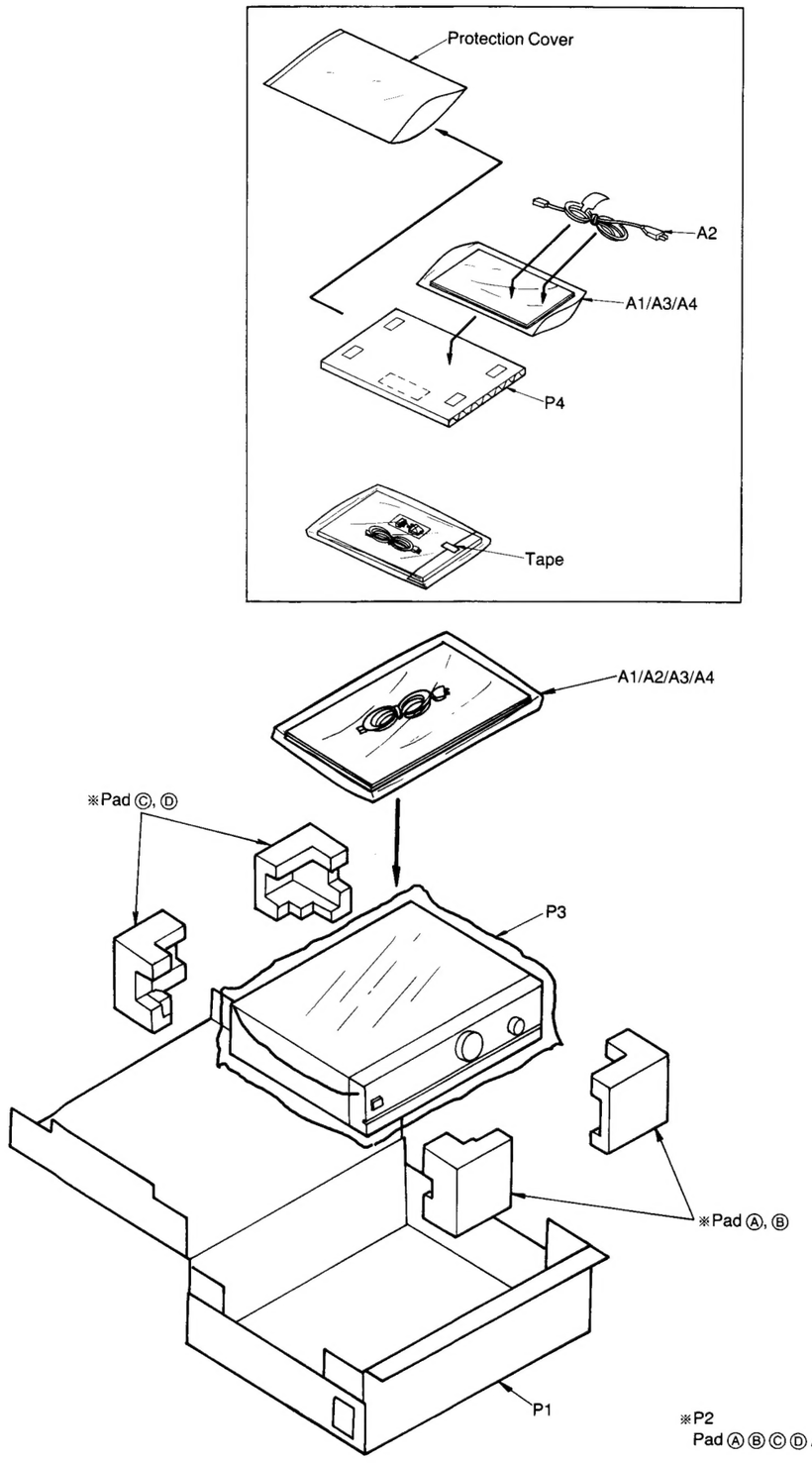
Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RGW0025A-K	MAIN VOLUME KNOB	
2	RGW0028-2K	BALANCE/TREBLE/BASS KNOB	
3	RGW0144-K	INPUT SELECTOR KNOB	
4	RKM0036A-K	CABINET	
5	SNE2129-1	SCREW	
6	XTBS3+8JFZ1	SCREW	
7	RGR0137B-A	REAR PANEL	(EG)
7	RGR0137B-B	REAR PANEL	(EB, GN)
8	RGU0030	POWER BUTTON	
9	RGU0118-K	SPEAKER BUTTON	
10	RGU0119-K	DIRECT BUTTON	
11	RGU0120-K	LOUNDNESS/SUBSONIC BUTTON	
12	RFKJUVZ320EG	BOTTOM BOARD ASS'Y	
12-1	RKA0009-1	FOOT	
13	RFKNUVZ320EG	INDICATOR ASS'Y	
14	RFKGUVZ320EG	FRONT PANEL ASS'Y	
15	XTWS3+8T	SCREW	
16	RGK0098-2K	SIDE ORNAMENT(L)	
17	RGK0099-2K	SIDE ORNAMENT(R)	
18	RGK0212-K	VOLUME ORNAMENT	
19	RGQ0006-1	POWER BUTTON ORNAMENT	
20	RMR0136-K	HOLDER	
21	RMR0137-K	HOLDER	
22	RMR0502	SPACER	
23	SHE187-2	P.C.B. SPACER	
24	SJS9231A	AC INLET COVER	(EG, EB)
24	SJS9234A	AC INLET COVER	(GN)
25	SMC6407-2	SHIELD PLATE	
26	SNE2123	GND SCREW	
27	SNE4021-1	NUT	
28	XTB3+8JFZ	SCREW	
29	XTBS3+8JFZ1	SCREW	
30	XTB3+16JFZ	SCREW	
31	XTB3+20JFZ	SCREW	
32	XTB3+8JFZ	SCREW	
33	RGK0097	ORNAMENT(GOLD LINE)	
34	RWJ1807070KQ	FLAT CABLE(7P) (W501)	
35	RWJ1803130KK	FLAT CABLE(3P) (W601)	
36	RWJ1804130QQ	FLAT CABLE(4P) (W701)	
37	RMQ0303	HEAT SINK COVER	
38	RMR0537-K	HOLDER	
39	RSQ0027	REMOTE SWITCH CONTROLLER	
40	RSC0105	PHONO SHIELD ANGLE	

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPG1117	PACKING CASE	
P2	RPN0539	PAD	
P3	XZB52X60A01Z	PROTECTION COVER	
P4	RPQ0164	SPACER	
		ACCESSORIES	
A1	RFKSUVZ320EG	INSTRUCTIONS MANUAL	(EG)
A1	RQT1339-B	INSTRUCTIONS MANUAL	(EB, GN)
A2	RJA0019-1K	AC POWER SUPPLY CORD	⚠(EG)
A2	SJA193	AC POWER SUPPLY CORD	⚠(EB)
A2	SJA173	AC POWER SUPPLY CORD	⚠(GN)
A3	RQA0013	WARRANTY CARD	(EG, EB)
A3	RQX7433ZA	WARRANTY CARD	(GN)
A4	RQCB0169	SERVICE CENTER LIST	

■ CABINET PARTS LOCATION



■ PACKAGING



※P2
Pad Ⓐ Ⓑ Ⓒ Ⓓ Ass'y: RPN 0539

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